

BP Clean Fuels

September 23, 2004

Who is BP?



A Global Company

- 110,000 employees in over 100 countries
- The largest oil and natural gas producer in the U.S. and U.K.
- One of the nation's leading producers and consumers of solar power.
- Provider of cleaner low-sulfur gasoline to over 45 US Cities.
- Leader in the supply of H₂ to fuel cell vehicles and generators
- **Leader in the development and commercialization of Ultra Low Sulfur Diesel**



BP's Brand Promise



Brand
Values:

Performanc
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Green

Progressi
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Innovati
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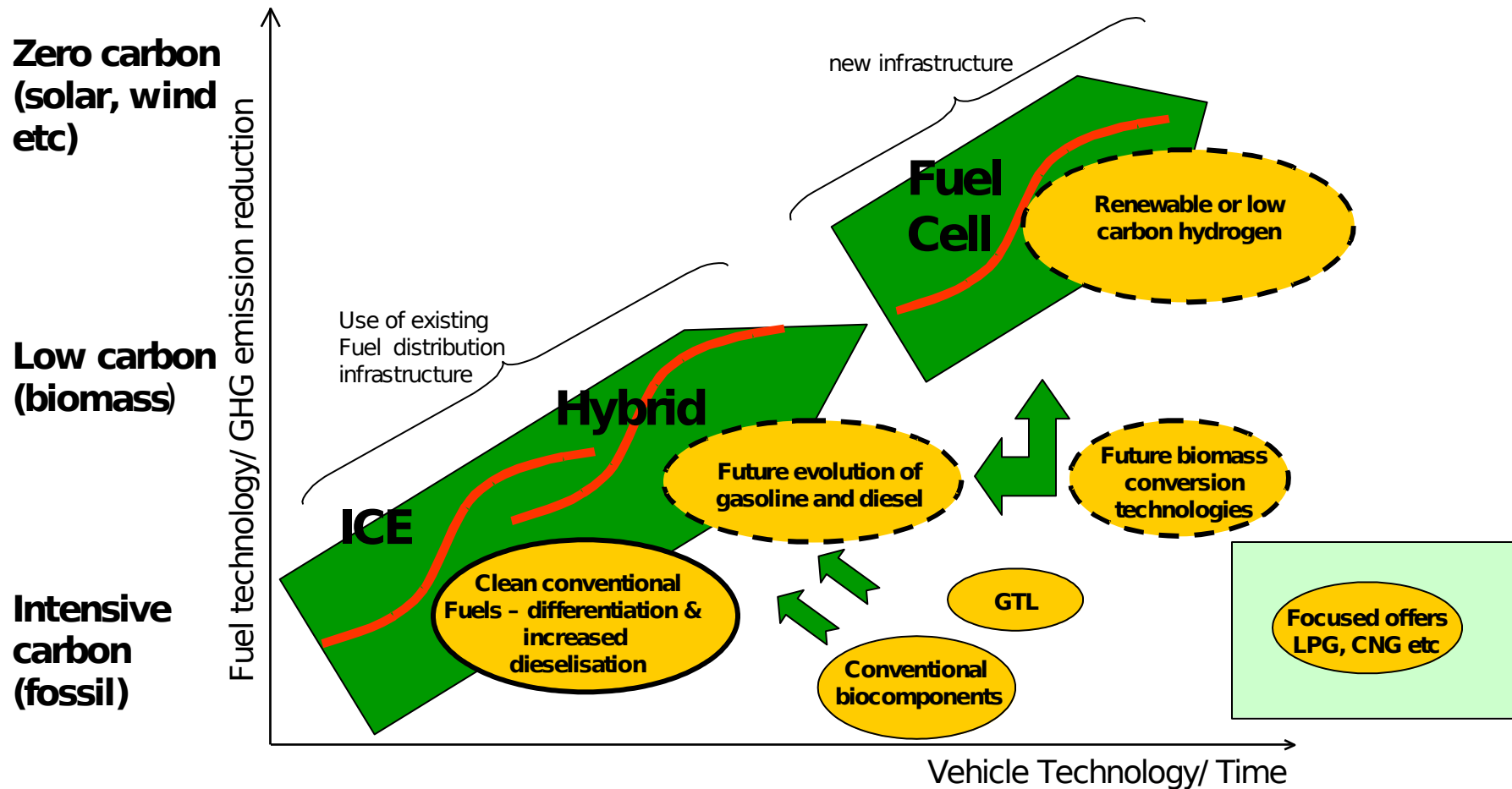
Brand Promise

“I believe the American people expect a company like BP, the largest single supplier of oil and gas in this country, to offer answers not excuses.”

John Browne



BP fuels pathway to the future



What is BP doing today?



- BP's immediate goal is to meet today's environmental challenges while providing people with the mobility, high performance and driving confidence they want
- Since 2000, BP has introduced low sulfur Amoco Ultimate gasoline to over 45 cities in the US in advance of 2006 EPA regulations
- Since 1999, BP has offered Ultra Low Sulfur Diesel to Commercial accounts in California and the Midwest, as well as Retail since 2002 in California

Benefits of Low Sulfur Gasoline



- Lower Emissions Amoco Ultimate has an average sulfur content of only 30 ppm (vs. 80 ppm in typical Northeast premium)
- The introduction of Lower Emissions BP and Amoco branded premium gasoline has the benefits of removing approximately 51,000 cars off the road each day on average in the New York Metro area, including Westchester County and New Jersey

BP a Leader in ULSD development



- 1999 launched large scale demonstration project
 - US DOE, NREL, CARB and SCAQMD partners in program and funded emissions work
 - Industry Program Member
 - Engelhard & Johnson Matthey (*PM filter suppliers*) Cummins, International, Detroit Diesel and Ford
 - Over 150 vehicles evaluated over a year
- First to market in California (2000)
 - Started commercial sales early 2000
 - Selling through three channels of trade
 - direct, distributors, retail stations & card locks
- First to market in Midwest
 - 2002 - Cleveland transit, Ann Arbor transit
 - 2003 - Chicago Transit Authority, Capital Area Transit Authority
 - 2004 - Metropolitan Council (Twin Cities); Transit Authority of River City; Charlotte Area Transit System; Madison Gas and Electric

What is ULSD



- BP's Trademarked Ultra Low Sulfur Diesel is ECD® **E**mission **C**ontrol **D**iesel

ECD®

- The change to ECD® reduces PM 10 - 15% compared to standard diesel
- ECD® enables Catalyzed PM Filter, together PM, HC and toxics are reduced by 90% or more compared to standard diesel

	ECD® (mid west)	Standard Diesel
Sulfur (ppm)	30 maximum ~15 average	500 maximum 330 average

Hold on ... what about Lubricity?



- Sulfur removal can reduce lubricity
 - Fuel lubricity is the ability to lubricate fuel injectors and pumps
 - Lubricity is especially important in new generation fuel injectors (fuel is used as a lubricant for moving parts)
- Engine manufacturers generally specify 3100g minimum on ASTM SBOCLE test – conservatively simulates in-use operation
- BP ECD
 - Formulated to exceed the lubricity standard
 - Ensures your engine is protected

Retrofit Technology Overview



- Proven emissions reductions
 - EPA and CARB verified/certified
 - Over 20,000 in Europe since mid 90's
 - In use by transits and other fleets primarily in California and on the East Coast where ULSD is available
 - BP tanker trucks in Los Angeles ~300,000+ miles maintaining emissions reductions

Summary of Performance Benefits



- With ECD[®], BP is offering tomorrow's diesel today that . . .
 - Enables exhaust emissions control technologies for greatly reduced emissions including toxics
 - Is far more cost effective than alternative fuels like CNG
 - Maintains the proven reliability and efficiency of diesel engines
 - Enhances public reputation
 - Provides significant and sustainable environmental benefits

Why ECD®?



- Environmentally superior fuel and technology
- Consumer friendly economical and practical proven method for reducing emissions
- ECD® is the future, it is *“Tomorrow’s Diesel Today”*

“The diesel of tomorrow is not going to be the diesel of today.”

Margo Oge,

EPA

Director of the Office of Transportation & Air Quality

www.ecdiesel.com